UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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REGIONAL
ADMINISTRATOR'S
DIVISION

August 17, 2022

Robin Brown
Fish and Wildlife Services
2600 SE 98th Avenue, Suite 100
Portland, Oregon 97266

Dear Robin Brown:

The U.S. Environmental Protection Agency has reviewed the U.S. Fish and Wildlife Service's July 2022 Notice of Intent to prepare an Environmental Impact Statement for the Barred Owl Management Strategy in Washington, Oregon, and California (EPA Project Number 22-0042-USFWS). EPA has conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

According to the NOI, the Draft EIS will evaluate the potential environmental impacts associated with implementing a management strategy, including any necessary Migratory Bird Treaty Act take authorization, to reduce barred owl populations to improve the survival and recovery of northern spotted owls and prevent declines in California spotted owls from barred owl competition. Management activities will occur in Washington, Oregon, and California.

EPA supports the FWS's efforts to improve the survival and prevent the decline of northern spotted owls. We provide our recommendations for the Draft EIS in the enclosed detailed comments.

We look forward to reviewing the Draft EIS when it becomes available. If you have questions about our comments, please contact me at (206) 553-1774 or at chu.rebecca@epa.gov, or the following lead NEPA reviewers:

- Washington and Oregon – Caitlin Roesler at (206) 553-6518 and roesler.caitlin@epa.gov
- California – Jason Gerdes at (415) 947-4221 and gerdes.jason@epa.gov

Sincerely,

REBECCA CHU Digitally signed by REBECCA CHU
Date: 2022.08.17 16:32:31 -07'00'

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

U.S. EPA Detailed Comments on the
Barred Owl Management Strategy NOI
Washington, Oregon, and California
August 2022

Impacted Resources

EPA recommends that the EIS disclose which resources (e.g., water, air) may be impacted by the proposed project, the nature of the potential impacts, and the specific pollutants likely to impact those resources. Report waterbodies potentially affected by the project that are listed on the State's most current EPA-approved 303(d) list of impaired waters. Describe any existing restoration and enhancement efforts for those waters, and how the project will coordinate with Washington Department of Ecology, Oregon Department of Environmental Quality, and California State Water Resources Control Board.

Alternatives Analysis

EPA recommends that the FWS explore and objectively consider a full range of alternatives and evaluate in detail all reasonable alternatives that fulfill the project's purpose and need. We encourage selection of alternatives that protect, restore, and enhance the environment. We support efforts to identify and select alternatives that maximize environmental benefits and that avoid, minimize, and/or otherwise mitigate environmental impacts.

The NOI states the FWS will prepare an EIS that will include a reasonable range of alternatives, which may include, but are not limited to, variations in the identification of high priority management sites, areas of concern, and specific mapped areas; protocols for the selection of management areas; and methods for managing barred owls in selected areas. If implementing a "suite" of proposed alternatives is a possible approach, then the EIS must clearly assess and disclose the combined impacts to each resource area under analysis.

Consider a range of reasonable alternatives that fulfill the proposed action's purpose and need and evaluate these alternatives in detail. To effectively compare alternatives, evaluate an alternative that would avoid methods that are lethal, toxic to the environment, hazardous to human health or pets, and/or could adversely affect non-target species. Quantify the potential direct, indirect, and cumulative environmental impacts of each alternative to the greatest extent possible and present the benefits and adverse impacts in comparative form to assist the decision-maker and public in understanding how the alternatives differ (40 CFR 1502.14). In the event alternatives are identified by stakeholders during the scoping process, and the EIS does not fully evaluate the recommended alternative, include a robust justification as to why.

Baseline Environmental Conditions

When evaluating effects, EPA recommends using existing environmental conditions as the baseline for comparing impacts across all alternatives, including the no action alternative. Providing a frame of reference is important for quantifying and/or characterizing magnitudes of effects and understanding each alternative's impacts and potential benefits, which is particularly important when there are environmental protections in place that are based on current conditions, such as total maximum daily loads (TMDLs) for impaired creek segments.

Present impacts to resources as a comparison to the existing conditions baseline using a consistent method of measuring project impacts for all alternatives in the EIS. By utilizing existing environmental conditions as a baseline, future changes to environmental resources can be more accurately measured for

all alternatives, including the no action alternative. We recommend that the FWS consider the following when defining baseline conditions:

- Verify that historical data (e.g., data five years or older) are representative of current conditions.
- Include resources directly impacted by the project footprint within the geographic scope of analysis, as well as the resources indirectly (or secondarily) impacted by the project (40 CFR 1508.1(g)(1)).

Water Quality

One of EPA's primary considerations of any project is the potential effects on surface and groundwater quality. In wildlife damage management, EPA is particularly concerned about potential impacts from the use of pesticides and carcass disposal. Under any alternative that evaluates lethal methods, discuss if pesticides and/or animal carcasses could impact water quality, aquatic species, and water resources for wildlife and livestock. Discuss mitigation to address potential issues including options for managing wildlife carcasses. For example, sawdust or wood shavings could be used in aboveground burial trench excavations to prevent the sideways movement of fluids in areas with shallow water tables.[1]

Public drinking water and/or their source areas exist in many watersheds, and it is possible that source water areas exist within wildlife damage management areas. Source water is water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water. The 1996 amendments to the Safe Drinking Water Act require federal agencies to protect sources of drinking water for communities. State agencies have been delegated responsibility to delineate and map each federally regulated public water system, and to conduct source water assessments and provide a database of information about the watersheds and aquifers that supply public water systems. The application of pesticides, as well as wildlife carcasses that may contain toxins from ingested pesticides, can contaminate drinking water sources and adversely affect public health and safety. To help identify source water protection areas, EPA recommends that the FWS contact Washington Department of Ecology, Oregon Department of Environmental Quality, and California State Water Resources Control Board.

Identify all source water protection areas statewide and discuss all activities and potential contaminants caused by management activities that could potentially affect these areas. Disclose all measures that would be taken to protect the source water protection areas.

Pesticides

EPA understands that wildlife damage management may require the use of a variety of pesticides, including repellents, reproductive inhibitors (i.e., wildlife contraceptives), frightening agents, immobilizing agents, fumigants, aversive conditioning agents, herbicides (to alter habitat), and anticoagulant[2] and acute toxicants. When used properly, pesticides can play a valuable role to prevent or reduce wildlife damage. However, pesticides use may impact nontarget species, including state or federally listed species, and the storage, handling, and use of pesticides may result in human exposure to toxic chemicals. In addition, sensitive populations are more susceptible to health effects from toxins if contaminated.

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[1] Animal and Plant Health Inspection Service. July 2018. Wildlife Carcass Disposal. Available at https://www.aphis.usda.gov/wildlife_damage/reports/Wildlife%20Damage%20Management%20Technical%20Series/Carcass-Disposal-WDM-Technical-Series.pdf.

[2] On September 29, 2020, California Governor Gavin Newsom signed Assembly Bill 1788, which prohibits the use of second-generation anticoagulant rodenticides (SGAR) until the Department of Pesticide Regulation's Director certifies that specific measures have been taken to reevaluate, restrict (in consultation with the California Department of Fish and Wildlife), and only use SGARs when necessary (Section 12978.7(g) of the Food and Agricultural Code).

EPA recommends the EIS:

- Disclose all pesticides that would be used, address any potential toxic hazards related to the application of the chemicals, how chemicals comply with the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act and describe what actions would be taken to assure that impacts by toxic substances released to the environment would be minimized.
- Discuss applicator training and worker safety standards to eliminate exposure to toxic chemicals. Address the potential direct, indirect, and cumulative impacts of pesticide use on sensitive population's health, including the elderly, children (including consideration of prenatal exposures), and the immunocompromised.
- Address children's health in accordance with Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (April 1997), which directs that each Federal agency shall make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and shall ensure that its policies, programs, activities, and standards address these risks. Analysis and disclosure of these potential effects is appropriate because some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to health and safety risks. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed, and their growing organs are more easily harmed.

Biological Resources

Threatened and Endangered Species

We recommend that the FWS determine potential impacts of the project on plant and wildlife species, especially species classified rare, threatened, or endangered on either state or federal lists. Identify and quantify which species and/or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species; emphasize the protection and recovery of species due to their status or potential status under the federal or state Endangered Species Act. Discuss the project's consistency with existing laws and regulations. Summarize, or include as an appendix in the EIS, the FWS's biological opinion if one is prepared. Demonstrate that the preferred alternative is consistent with the biological opinion, if applicable. Discuss mitigation measures to minimize impacts to special status species, describe the effectiveness of such measures to protect wildlife, and indicate how they would be implemented and enforced.

Other Wildlife Species

It is possible that other nontarget species may be impacted through wildlife damage management. EPA is particularly concerned about migratory bird species protected under the Migratory Bird Treaty Act. Identify and quantify which nontarget species might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Discuss the regulatory framework of the MBTA and potential impacts from wildlife damage management. Discuss mitigation measures to minimize impacts to non-target wildlife species, describe the effectiveness of such measures to protect wildlife, and indicate how they would be implemented and enforced.

Habitat Connectivity and Wildlife Movement

In the EIS, analyze the proposed project's impacts to habitat connectivity in the project area and discuss measures that could mitigate any identified impacts. Such measures may include appropriate infrastructure to facilitate wildlife movement across the project area. If appropriate, include design

commitments that: 1) remove barriers to safe wildlife passage; 2) enhance use of identified wildlife corridors; and 3) provide crossings with suitable habitat and topography to accommodate multiple species. Include commitments to how the project will ensure design elements would be constructed to enable wildlife connectively, including types of features and approximate locations.

Ecosystem Services

The sustainable use of natural ecosystems, including activities affecting wildlife populations, have an important role in the conservation of biodiversity and ecosystem services. We recommend the FWS consider the full range of ecological effects from the proposed actions, including, but not limited to local, regional, and state-wide biological diversity; trophic food web effects (i.e., trophic cascades); connections to ecological structure and function; interference of migratory wildlife movement; species outside the borders of Washington, Oregon, and California (migratory, and normal home range movements of species that move across state boundaries); riparian habitat or sensitive natural community; and ecosystem services that humans depend on and need from public lands. In the trophic cascades discussion, include a distinct explanation of predator's critical roles in ecosystems and how predator damage management could result in a cascade of unintended consequences. For example, the loss of cougars through predator damage management could result in increased foraging of deer populations leading to ecological damage through loss of vegetation, which could result in increased erosion and declining biodiversity. Discuss how ecosystem services will be integrated into management decision-making.

Noise

Acoustic frightening devices and other wildlife damage management activities may affect noise levels, resulting in potential health impacts. A 2007 review article[3] that summarizes studies from the National Library of Medicine database on the adverse health effects of noise notes that long-term physical health effects have been linked to noise effects related to sleep disturbances, stress, and increased blood pressure, and can increase cardiovascular disease risk. These effects begin to be seen with long-term daily exposure to noise levels above 65 decibel (dB) or with acute exposure to noise above 80-85 dB. The World Health Organization recommends that, where noise is continuous, the equivalent sound pressure level should not exceed 30 dBA indoors if negative effects on sleep are to be avoided.[4] When the noise is composed of a large proportion of low-frequency sounds, a still lower guideline value is recommended because low frequency noise can disturb rest and sleep even at low sound pressure levels.

Discuss decibel levels associated with wildlife damage management equipment, tools, and methods, such as noise from firearms, trailing hounds, ATVs, pyrotechnics, and electronic calling devices. Evaluate how these techniques may impact non-target species and nearby human populations, including sensitive receptors. Compare noise impacts among alternatives and quantify the number of sensitive receptors that would be exposed for each alternative.

Climate Change

EPA promotes resilience to climate change by protecting biodiversity and habitat connections are especially important adaptation strategies. We recommend the EIS include an analysis of climate change impacts in the monitoring strategy. Discuss how the FWS will evaluate the success of conservation activities and would adapt treatment methods or other management actions to address changes in environmental conditions.

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[3] Goines, Lisa RN and Hagler, Louis MD. 2007. Noise Pollution: A Modern Plague. *Southern Medical Journal*: Volume 100, Issue 3, p. 287-294. Available at https://www.researchgate.net/publication/51380004_Noise_Pollution_A_Modern_Plague.

[4] World Health Organization. April 1999. Guidelines for Community Noise. Available at https://www.who.int/docstore/peh/noise/Comnoise-1.pdf.

Environmental Justice
Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. It further directs agencies to develop a strategy for implementing environmental justice and providing minority and low-income communities access to public information and public participation.

We encourage the FWS to use EPA's EJSCREEN and/or the most recent American Community Survey from the U.S. Census Bureau (i.e., Five-Year Date Profile Estimates for 2013-2019) for the EIS to determine the presence of minority and low-income populations within the project area. To best illustrate the presence of a minority population, we recommend that the FWS analyze block groups, the smallest geographical unit that the U.S. Census Bureau publishes data for. We caution using larger tracts in the analysis, such as counties or cities, as these may dilute the presence of minority populations.

After the FWS has determined if minority and low-income populations exist in the project area, we recommend that the EIS discuss whether these communities would be potentially affected by individual or cumulative actions of the proposed action. We also recommend addressing whether any of the alternatives would cause any disproportionate adverse impacts, such as higher exposure to toxins; changes in existing ecological, cultural, economic, or social resources or access; cumulative or multiple adverse exposures from environmental hazards; or community disruption.

If it is determined that minority and low-income populations may be disproportionately impacted, describe in the EIS the measures taken by the FWS to fully analyze the environmental effects of the action on minority communities and low-income populations and identify potential mitigation measures. Clearly identify a monitoring and adaptive management plan to ensure that mitigation is effective and successful.

Present opportunities for affected communities to provide input into the NEPA process. In the EIS, include information describing what was done to inform these communities about the proposed activities within the project area (e.g., notices, mailings, fact sheets, briefings, presentations, translations, newsletters, reports, community interviews, surveys, canvassing, telephone hotlines, question and answer sessions, stakeholder meetings, and on-scene information); the potential impacts it will have on their communities; what input was received from the communities; and how that input was utilized in the decisions that were made regarding the project.

Consultation with Tribal Governments
It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EIS. The principles for interactions with tribal governments are outlined in the presidential "Memorandum on Government-to Government Relations with Native American Tribal Governments" (April 29, 1994). In the EIS, summarize the results of tribal consultation and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the EIS describe the issues raised during the consultations and how those issues were addressed.

National Historic Preservation Act
Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act. Historic properties under the NHPA are properties that are included in the National

Register of Historic Places or that meet the criteria for the NRHP. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be disclosed in the EIS. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following the regulation at 36 CFR 800.

In the EIS, EPA recommends a discussion of avoiding or minimizing adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. Clearly discuss mitigation measures for archaeological sites and TCPs. We encourage appending any Memoranda of Agreements to the EIS and considering redacting specific information about these sites that is sensitive and protected under Section 304 of the NHPA. We also recommend providing a summary of coordination with tribes and with the SHPO/THPOs in the EIS.

Executive Order 13007

Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. EPA recommends the EIS, describe how it will address Indian Sacred Sites and ensure that the proposed project would avoid or mitigate for the impacts to the physical integrity, accessibility, or use of sacred sites.

Cumulative Impacts

Cumulative impacts result when the effects of an action are added to other effects on a resource in a particular place and within a particular time. Focus cumulative impact analysis on the combination of these effects and any resulting environmental degradation. In analyzing alternatives, we recommend the FWS refer to EPA's "Consideration of Cumulative Impacts in EPA Review of NEPA Documents."[5] The guidance states that to assess the adequacy of the cumulative impacts assessment, consider five key areas below.

(1) Identifies resources, if any, that are being cumulatively impacted.

(2) Determines the appropriate geographic area (within natural ecological boundaries) and the time period over which the effects have occurred and would occur.

(3) Describes a benchmark or baseline.

(4) Looks at all past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern.

(5) Includes scientifically defensible threshold levels.

Adaptive Management and Monitoring

Include a monitoring and adaptive management plan that evaluates the effectiveness of habitat and population treatments and explain how population surveys will inform future actions. EPA appreciates that "[a]ll action alternatives will include monitoring of spotted and barred owls on management areas, and an adaptive management component to provide for minor modifications as new information becomes available." We recommend this plan be included in the EIS.

[5] https://www.epa.gov/nepa/cumulative-impacts-guidance-national-environmental-policy-act-reviews.

Coordination with Land Use Plans
EPA recommends the EIS discuss how the project relates to, and will be integrated with, federal, state, tribal, and local land use plans in the planning area. EPA recommends that the EIS describe all types of land use plans in the area, including formally adopted documents for land use planning, conservation, zoning, and related regulatory requirements, as well as plans not yet developed that have been proposed by the appropriate government body in a written form.[6]

Discuss how the project is consistent with the goals, objectives, and management decisions and actions prescribed in land use plans in the project area, including, but not limited to, FWS Habitat Conservation Plans, Bureau of Land Management Resource Management Plans, and U.S. Forest Service Land and Resource Management Plans.

Public Review of the NEPA Document
The EIS "shall be concise, clear and to the point" (40 CFR 1502.1) and "written in plain language…so that decisionmakers and public can readily understand them" (40 CFR 1502.8). EPA also considers document organization an important aspect to the navigability and readability of the EIS.
Write in concise, plain language and use concepts that are easily understandable for the public.
Ensure that referenced materials, including any studies, data sources, methodologies and other technical aspects, are presented in a publicly accessible way. We encourage including them on the project website or providing links in the citations. Bookmark document sections and include a table of contents for figures and maps to ensure easy navigability of the EIS.

[6] See: "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," #23b. https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf.